

# 2010-11-12 Friday Morning Notes

Friday, November 12, 2010  
3:53 AM

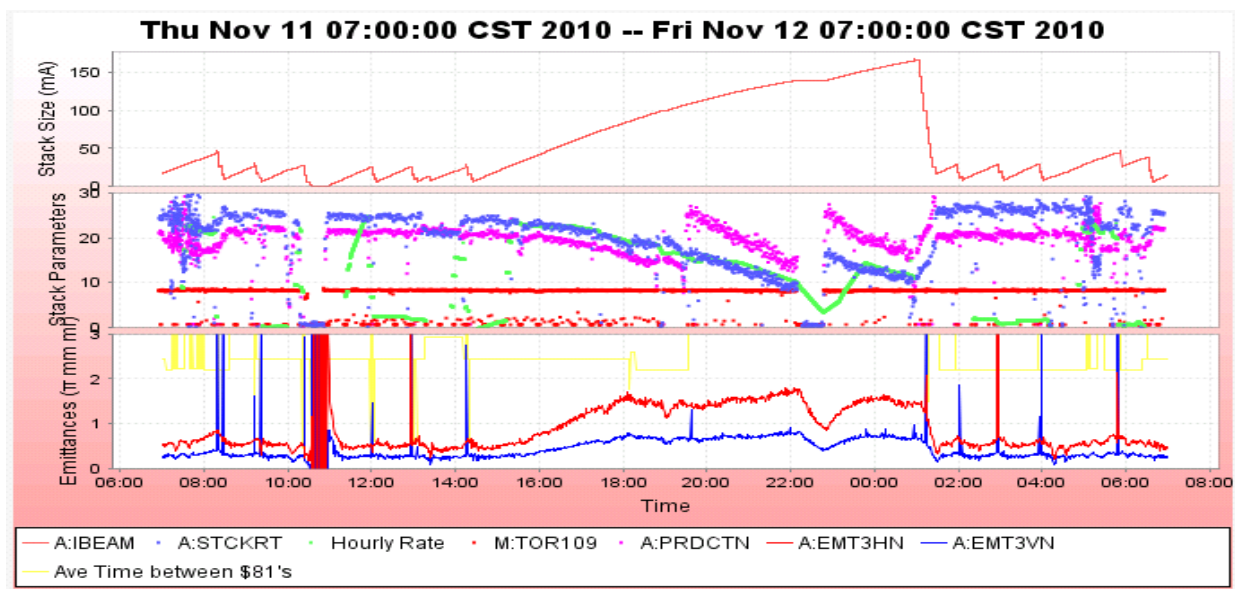
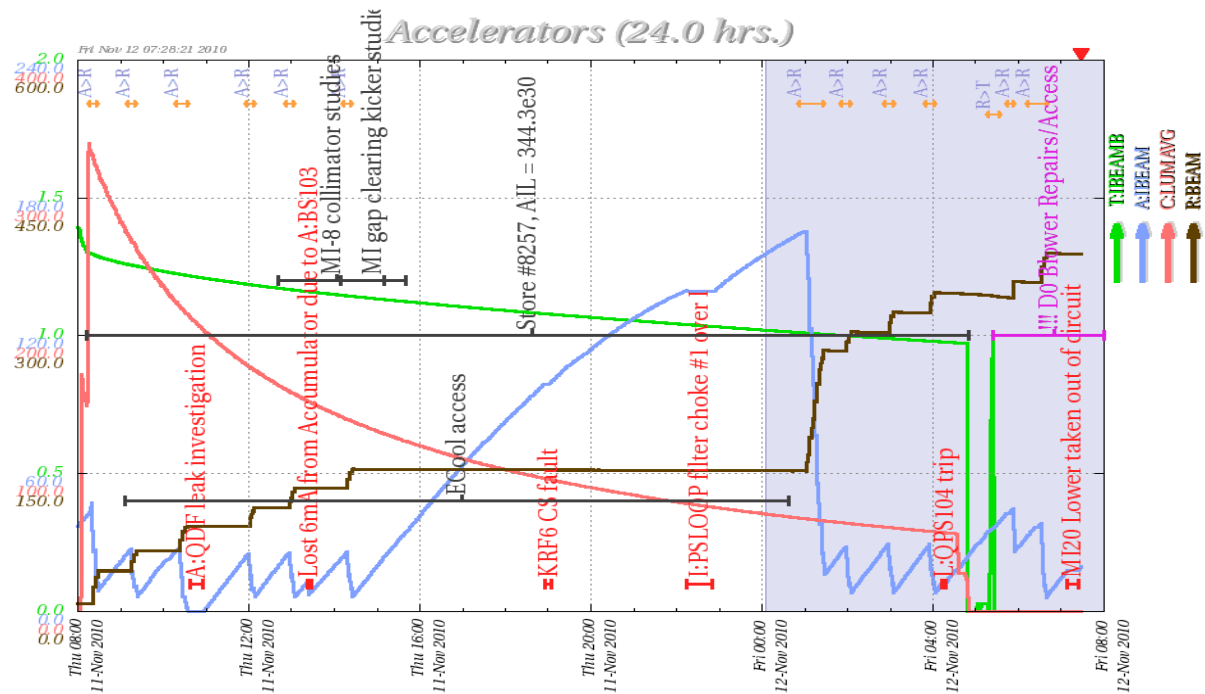
## Stacking and Transfers

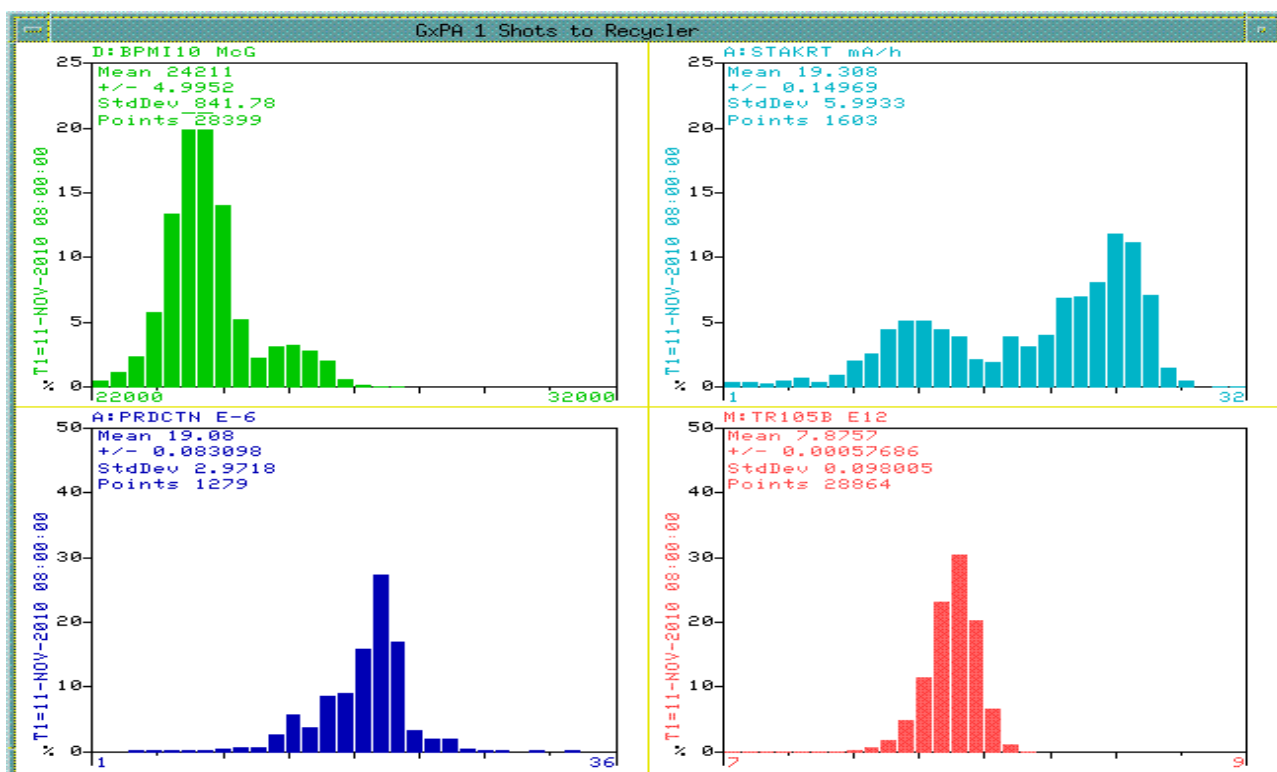
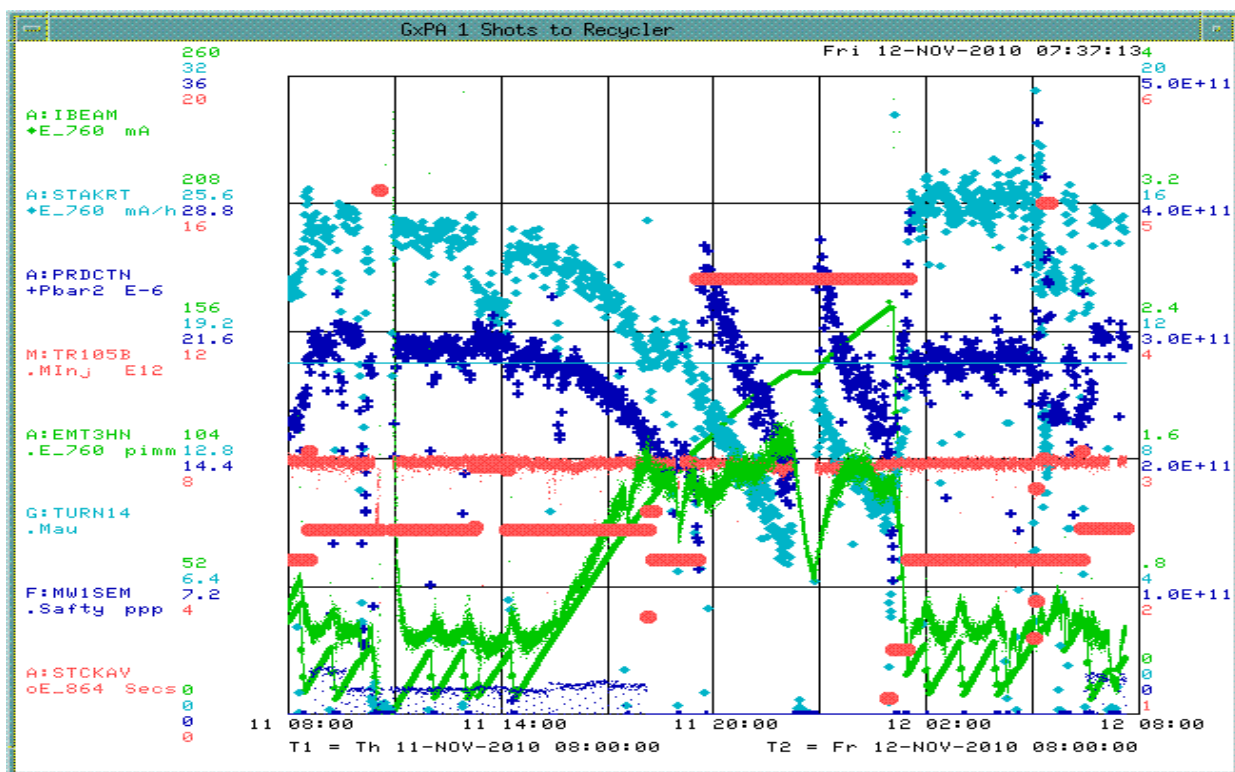
- Large stack due to pellatron off
- Stacking numbers
  - $\langle \text{stacking rate} \rangle = 19.3 \text{ mA/hr}$
  - $\langle \text{production} \rangle = 19.1 \text{ pbar/Mp}$
  - $\langle \text{beam on target} \rangle = 7.88 \text{ E12}$
- Unstacking Numbers
  - Unstacked 435 in 40 transfers over 12 sets with an average efficiency of 92.7%

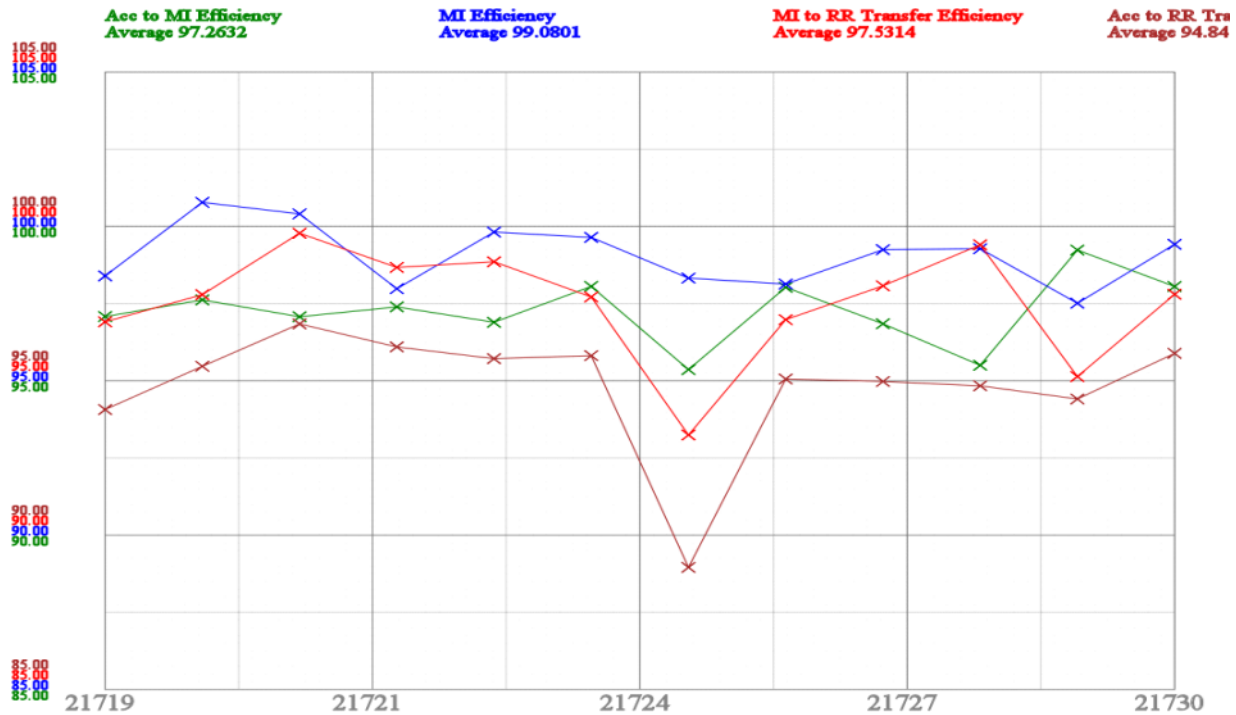
## Numbers

- Stacking
  - Pbars stacked:  $423.25 \text{ E10}$
  - Time stacking: 22.84 Hr
  - Average stacking rate:  $18.53 \text{ E10/Hr}$
- Uptime
  - Number of pulses while in stacking mode: 30121
  - Number of pulses with beam: 29045
  - Fraction of up pulses was: 96.43%
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 22.03 Hr
  - Possible average stacking rate:  $19.21 \text{ E10/Hr}$
  - Could have stacked:  $438.92 \text{ E10/Hr}$
- Recycler Transfers
  - Pbars sent to the Recycler:  $423.09 \text{ E10}$
  - Number of transfers : 39
  - Number of transfer sets: 12
  - Average Number of transfer per set: 3.25
  - Time taken to shoot including reverse proton tuneup: 00.14 Hr
  - Transfer efficiency: 92.13%
- Other Info
  - Average POT :  $7.87 \text{ E12}$
  - Average production:  $18.51 \text{ pbars/E6 protons}$
- \* Red indicates a problem during data retrieval. See the message window for details.

## Plots







Column 1 Number _0_Pbar Transfer Shot #	Column 4 Number_3 Transfer Time	Column 21 Number _20_A-I BEAMB sampled on \$91 (A:BEA M7), E10	Column 22 Number _21_A-I BEAMB sampled on \$94 (A:BEA M9), E10	Unstacked (mA)	Column 23 Number _22_R- BEAMS (R:BEA ME0[0]) pre xfer E10	Column 24 Number _23_R- BEAM (R:BEA ME0[1]) post xfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Trans fers	Sets	Column 5 Number _4_Acc Horizontal Emittance	Column 6 Number _5_Acc Vertical Emittance	Column 8 Number _7_Acc Longitudinal Emittance	
	Totals =>			434.85			402.89	92.65%	96.66%	95.50%	92.31%	40	12	5.7974	2.8533	1.9185	
	Daily Average =>			434.85			402.89					40	12				
21730	Friday, November 12, 2010	6:32	38.33	6.03	34.41	357.81	390.33	33.00	95.90%	98.33%	98.10%	96.47%	3	1	4.872	2.593	1.891
21729	Friday, November 12, 2010	5:53	44.94	25.74	19.20	341.27	359.40	18.13	94.41%	99.24%	96.77%	96.04%	1	1	7.018	3.11	1.781
21728	Friday, November 12, 2010	3:55	29.48	7.74	24.34	324.64	347.18	23.06	94.74%	96.27%	95.23%	91.67%	3	1	5.436	2.853	2.02
21727	Friday, November 12, 2010	2:58	29.64	7.87	24.30	303.24	325.86	23.04	94.81%	97.02%	96.59%	93.71%	3	1	6.197	2.987	1.99
21726	Friday, November 12, 2010	1:58	28.57	7.93	23.18	283.20	304.75	21.95	94.69%	97.87%	96.84%	94.78%	3	1	5.622	2.85	1.986
21725	Friday, November 12, 2010	1:03	165.64	15.90	154.31	152.99	284.75	135.82	88.02%	94.98%	93.20%	88.53%	8	1	9.731	4.556	1.632
21724	Thursday, November 11, 2010	14:17	25.87	6.02	22.18	133.95	155.01	21.20	95.58%	97.71%	97.41%	95.18%	3	1	5.444	2.644	1.97
21723	Thursday, November 11, 2010	12:57	25.97	6.21	22.26	113.08	134.24	21.27	95.57%	97.34%	96.75%	94.17%	3	1	5.165	2.562	1.99
21722	Thursday, November 11, 2010	12:00	25.52	6.14	21.85	92.34	113.22	21.00	96.07%	97.45%	95.31%	92.87%	3	1	4.937	2.491	1.992
21721	Thursday, November 11, 2010	10:23	27.40	0.30	27.10	66.33	92.50	26.29	96.99%	97.59%	97.51%	95.15%	4	1	3.01	1.549	1.828
21720	Thursday, November 11, 2010	9:15	27.55	5.91	23.59	44.14	66.52	22.42	95.04%	97.42%	98.08%	95.54%	3	1	5.141	2.707	2.002
21719	Thursday, November 11, 2010	8:21	44.53	8.63	38.11	8.91	44.34	35.71	93.70%	97.33%	95.70%	93.15%	3	1	6.996	3.337	1.94